

## Patent Abstracts of Japan

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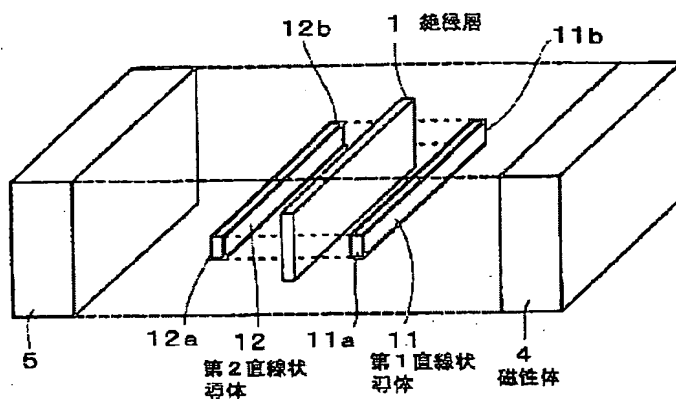
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TITLE : CHIP COMMON MODE CHOKE COIL



ABSTRACT : PROBLEM TO BE SOLVED: To provide a chip common mode choke coil superior in high speed transmission by lessening the capacitance between the parts of a coil conductor and heightening the resonant frequency of common mode characteristics.

SOLUTION: The chip common mode choke coil forms the same shaped first and second linear conductors 11 and 12 making a pair on the front and rear of an insulating layer, sandwiches the first and second linear conductors 11 and 12 with magnetic components 4 and 5, and has a structure forming a coil conductor making the pair by only the linear conductors 11 and 12. Both ends of each linear conductor 11 and 12 are connected to a mounting outside electrode respectively, and the mounting outside electrode is formed so that the formation face of each linear conductor 11 and 12 is vertical to a mounting surface. When a thickness of the insulating layer 1 is  $t_1$ , the thickness of the first linear conductor 11 is  $t_2$  and the thickness of the second linear conductor 12 is  $t_3$ , a condition of  $t_1+t_2+t_3>100\text{ }\mu\text{m}$  is desired to be satisfied.

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